

(c) a distributed video mosaic generator, in communication with the AV path, for combining at least a portion of the mosaic image with a captured image of a third participant into a distributed mosaic image for reproduction at at least one work station.

3. The teleconferencing system of claim 2, further comprising:

(a) a close-up selector for selecting one participant's image reproduced in the distributed mosaic image and replacing the distributed mosaic image with the selected image.

4. The teleconferencing system of claim 2 further comprising:

(a) at least a first and a second video mosaic generator for respectively combining the captured images of a plurality of participants into first and second mosaic images for reproduction at the workstations of at least one of the participants.

5. The teleconferencing system of claim 2 further comprising:

(a) a participant display selector for selecting which of the participants are to have their corresponding captured video image displayed in the mosaic image.

6. The teleconferencing system of claim 5, wherein the participant display selector selects the participants automatically.

7. The teleconferencing system of Claim 5 wherein the video mosaic generator is operable to generate a video mosaic of fewer participants than the number of actual participants and the participant display selector is operable to select which of the actual participants will have a corresponding video image displayed.

8. The teleconferencing system of claim 2 further comprising:

(a) at least one codec for compressing the mosaic image and the captured image of the third participant, and wherein the means for combining can combine the compressed mosaic image and the compressed image of the third participant.

9. A teleconferencing system for conducting a teleconference among a plurality of participants having workstations with associated monitors for displaying visual images, and with associated AV capture and reproduction capabilities for capturing and reproducing video images and spoken audio of the participants, the workstations being interconnected by a first network, the network providing a data path for carrying digital data signals among the workstations, the teleconferencing system comprising:

(a) an AV path for carrying AV signals representing video images and spoken audio of the participants among the workstations;

(b) a video mosaic generator, in communication with the AV path, for combining the captured images of a first, second and third of the participants into a mosaic image for reproduction at the workstations of the first, second and third participants; and

(c) an audio summer, in communication with the AV path, for receiving the captured audio of the first, second and third participants and combining the received audio of the second and third participants into an audio sum for reproduction at the workstation of the first participant.

10. The teleconferencing system of claim 9 further comprising:

(a) a close-up selector for selecting one participant's image reproduced in the mosaic image and replacing the mosaic image with the selected image.

11. The teleconferencing system of claim 10, further comprising:

(a) at least a first and a second video mosaic generator for respectively combining the captured images of a plurality of participants into first and second mosaic images; and

(b) image synchronization means for synchronizing the mosaic images generated by the video mosaic generators such that a plurality of mosaic images can be reproduced at the workstations of at least one of the participants.

12. The teleconferencing system of claim 11, further comprising:

(a) a participant display selector for selecting which of the participants are to have their corresponding captured video image displayed in the mosaic image.

9 13. The teleconferencing system of claim 12, wherein the participant display selector selects
the participants automatically. 8

14. The teleconferencing system of Claim 12 wherein the video mosaic generator is operable to generate a video mosaic of fewer participants than the number of actual participants and the participant display selector is operable to select which of the actual participants will have a corresponding video image displayed.

15. The teleconferencing system of claim 9, further comprising:

(a) at least one codec for compressing the mosaic image and the captured image of the fourth participant, and wherein the means for combining a portion of the mosaic image can combine the compressed mosaic image and the compressed captured image of the fourth participant.

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16. The teleconferencing system of claim ~~9~~⁶, further comprising:

(a) an echo canceler to reduce echo during the reproduction of the audio sum.

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17. The teleconferencing system of claim 9 further comprising:

(a) a distributed mosaic generator in communication with the AV path, for combining at least a portion of the mosaic image with a captured image of a fourth participant into a distributed mosaic image for reproduction at the workstation of at least one of the participants.

18. The teleconferencing system of claim 17, further comprising an echo canceler to reduce echo during the reproduction of the audio sum.

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19. The teleconferencing system of claim 17 wherein the AV reproduction capabilities associated with at least the workstation of the first participant includes a plurality of speakers and further comprising:

(a) an audio control for controlling the reproduction of the audio sum at the first participant's workstation such that the composition of the audio originating from each of the second and third participants reproduced at each speaker is dependent on a position of the images of the second and third participant in the reproduced mosaic image.

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20. The teleconferencing system of claim 9 wherein the AV reproduction capabilities associated with at least the workstation of the first participant includes a plurality of speakers and further comprising:

(a) an audio control for controlling the reproduction of the audio sum at the first participant's workstation such that the composition of the audio originating from each of the second and third participants reproduced at each speaker is dependent on a position of the images of the second and third participant in the reproduced mosaic image.

21. A method for conducting a teleconference among a plurality of participants having workstations with associated monitors for displaying visual images, and with associated AV capture and reproduction capabilities for capturing and reproducing video images and spoken audio of the participants, the workstations being interconnected by a first network, the network

providing a data path for carrying digital data signals among the workstations, the method comprising the steps of:

- (a) moving AV signals representing video images and spoken audio of the participants among the workstations;
- (b) combining the captured images of a first and a second participant into a mosaic image; and
- (c) a distributed video mosaic generator, in communication with the AV path, for combining at least a portion of the mosaic image with a captured image of a third participant into a distributed mosaic image for reproduction at at least one work station.

Sub 5 22. The method of claim 21, further comprising the steps of:

- (a) selecting one participant's image reproduced in the distributed mosaic image; and
- (b) replacing the distributed mosaic image with the selected image.

Sub 6 23. The method of claim 21 further comprising the steps of:

- (a) combining the captured images of a plurality of participants into first and second mosaic images for reproduction at the workstations of at least one of the participants.

24. A method for conducting a teleconference among a plurality of participants having workstations with associated monitors for displaying visual images, and with associated AV capture and reproduction capabilities for capturing and reproducing video images and spoken

audio of the participants, the workstations being interconnected by a first network, the network providing a data path for carrying digital data signals among the workstations, the method comprising the steps of:

- (a) moving AV signals representing video images and spoken audio of the participants among the workstations;
- (b) combining the captured images of a first, second and third of the participants into a mosaic image for reproduction at the workstations of the first, second and third participants; and
- (c) receiving the captured audio of the first, second and third participants;
- (d) combining the received audio of the second and third participants into an audio sum; and
- (e) reproducing the audio sum at the workstation of the first participant.
25. The method of claim 24 ~~further~~ comprising the steps of:
- (a) selecting one participant's image reproduced in said mosaic image; and
- (b) replacing said mosaic image with the selected image.
26. The method of claim 25 further comprising the steps of:
- (a) combining the captured images of a plurality of participants into first and second mosaic images; and
- (b) synchronizing the mosaic images generated by the video mosaic generators such that a plurality of mosaic images can be reproduced at the workstations of at least one of the participants.

27. The method of claim 26, further comprising the step of:

- (a) selecting which of the participants are to have their corresponding captured video image displayed in the mosaic image.

28. The method of claim 24 further comprising the steps of:

- (a) combining at least a portion of the mosaic image with a captured image of a fourth participant into a distributed mosaic image for reproduction at the workstation of at least one of the participants; and
- (b) reproducing the distributed mosaic image at the workstation of at least one of said participants.

29. The method of claim 28 wherein the AV reproduction capabilities associated with at least the workstation of the first participant includes a plurality of speakers, the method further comprising the steps of:

- (a) controlling the reproduction of the audio sum at the first participant's workstation such that the composition of the audio originating from each of the second and third participants reproduced at each speaker is dependent on a position of the images of the second and third participant in the reproduced mosaic image.